What Is Claimed Is:

1. A method of applying a coating liquid onto a surface of a moving web of paper with an applicator having an elongated width outlet orifice, comprising the steps of:

flowing coating liquid, though said elongate width outlet orifice spaced from and transversely of the web;

directing the coating liquid, after it has flowed through the elongate outlet orifice, in a free standing elongate jet curtain of coating liquid toward, across and against the surface of the web;

applying a sonic oscillation adjacent to the jet curtain on the side thereof likely not to be applied to the web for keeping the orifice clean;

applying with the jet an excess layer of coating liquid onto the web surface; and

wherein the orifice of the jet may be kept clean and more streak free coated paper may be produced as the orifice is not clogged.

2. A method as in Claim 1, comprising applying a first sonic oscillation to one portion of the web and applying a second sonic oscillation to another portion of the web.

3. A method as in Claim 2, wherein said first sonic oscillation is applied to about one half the width of the web.

4. A method as in Claim 1, wherein the applying a sonic oscillation step is carried out at the outlet orifice.

5. A method as in Claim 1, wherein the applying a sonic oscillation is at about 20000 cycles per second.

6. A method as in Claim 1, wherein applying said sonic oscillation is in at least the sonic frequency range.

7. A method as in Claim 6, wherein applying said sonic oscillation is in the ultrasonic frequency range.

8. A method as defined by Claim 1, wherein the applicator has a nozzle for conveying the liquid, the nozzle having said outlet orifice with a minimum gap width, wherein the step of vibrating comprises vibrating the nozzle, the vibrations having a magnitude of less than about 10% of the minimum gap width of the outlet orifice.

9. A method as defined by Claim 1, wherein the method further comprises:

inspecting the moving paper web for coating defects caused by obstructing said outlet orifice downstream of the applicator; and

performing the step of vibrating at least a portion of the applicator in response to a defect to remove obstructing said orifice.

10. A method as defined by Claim 9, wherein the step of vibrating comprises using at least one sonic rod vibrator connected to the nozzle.

11. A method as in Claim 10, wherein the step of vibrating comprising using two sonic rods in said applicator.

12. A method as defined by Claim 11, wherein the method further comprises operating said sonic rods in a pattern along the cross-machine width of the nozzle wherein only one of said sonic rods are operating at any given time.

13. A method as defined by Claim 1, wherein the method further comprises controlling the step of vibrating according to a control scheme, said control scheme being selected from the group of control schemes consisting of substantially continuous operation, intermittent operation, timed operation, and manual operation.

14. A coater for coating a moving web of paper, comprising a body having a discharge orifice for jetting coating onto the web, said jetted coating having one side most likely not to be applied to the web and an opposite side less likely to be applied to the web, a sonic oscillator located at and forming the tip of said discharge orifice, said sonic oscillator being located adjacent said one side of said jet and away from the other side of said jet, whereby the coating that is next to the oscillator is less likely to be applied to the web but said sonic oscillator yet keeps the discharge orifice clean to permit the production of more streak free and higher quality paper.

15. A coater as in Claim 14, wherein said sonic oscillator is a sonic rod, said sonic rod extending parallel to the orifice.

16. A coater as in Claim 14, wherein said sonic rod forms part of the outlet orifice of said coater.

17. A coater as in Claim 14, wherein said sonic oscillator has a sonic driver, said sonic driver being located beyond the web.

18. A coater as in Claim 14, wherein said coater has two sonic oscillators, one for each side of the web.

19. A coater as in Claim 18, wherein said sonic oscillators are sonic rods.

20. A coater as in Claim 19, wherein said sonic oscillators have sonic drivers, said sonic drivers being located beyond the webs.

21. A coater as in Claim 14, wherein said sonic rod has one or more nodes of minimum vibrations, and means are provided from moving the nodes.

22. A coater as in Claim 21, wherein said means for moving the one or more nodes alters the frequency of the sonic oscillator.

23. A coater as in Claim 22, wherein should a defect occur at said one or more nodes, said means for moving the one or more nodes, moves the one or more nodes off of the defect.

24. A system for clearing flow disruptions from a coater for applying a coating composition to a moving paper web, the system comprising:

a paper coating applicator having a nozzle orifice with a metering slot therein, said nozzle for applying a jet of coating to the paper web to form coating on the paper web;

web inspection means downstream of said applicator for detecting a coating defect on the moving web; and

at least one sonic rod oscillator connected to said nozzle for vibrating at least a portion of said nozzle with vibrations in response to detection of the coating defect by said web inspection means.

25. A system as defined by Claim 24, wherein said web inspection means inspects a plurality of web portions in the cross-machine direction of the web, and wherein said web inspection means communicates a signal on detection of the defect, said signal comprising a cross-machine location of said defect.

26. A system as defined by Claim 26, wherein the web has a cross-machine width, and wherein:

said nozzle has a cross-machine dimension substantially across the web width;

said sonic rod oscillator extends substantially across the web width;

said web inspection means comprising a plurality of sensors spaced apart along the cross-machine width of the web, each of said sensors for detecting a defect in a portion of the web; and

said sonic rod oscillator is connected to said nozzle and spaced along the cross-

machine dimension of said nozzle, whereby one or more selected ones of said sonic rod oscillators are actuated in response to a defect detected by one of said sensors.

27. A system as in Claim 25, further comprising a controller in communication with said web inspection means for controlling said sonic rod oscillator.

28. A system as in Claim 25, wherein said web inspection means comprises at least one electric eye, and wherein said at least one vibrator comprises at least one sonic or ultrasonic rod oscillator.

29. A computer program product for controlling a coating applicator, the applicator having a nozzle with a slot formed therein, the slot having a minimum gap width, the program product comprising computer executable instructions stored on a computer readable medium that when executed by a computer cause the computer to:

use at least one sonic rod oscillator to vibrate at least a portion of the exit of the nozzle.

30. A computer program product as in Claim 29, wherein the applicator for applying coating to a moving web, and wherein the program instructions when executed further cause the computer to:

inspect the moving web for coating defects using a web inspection system located downstream of the applicator; and

perform the step of vibrating the at least a portion of the exit of the nozzle in response to detection of a defect.

31. A computer program product as defined by Claim 30, wherein the moving web has a cross-machine width and the applicator nozzle and web inspection system extend in a cross-machine direction substantially coextensive with the web, wherein the program instructions further cause the computer to locate defects in the cross-machine direction using the web inspection system, to communicate a signal comprising the location of defects, and to vibrate a portion of the exit of the nozzle at a location in the cross-machine direction that corresponds to the defects.

32. A computer program product as defined by Claim 29, wherein said at least sonic rod oscillator comprises two sonic rod oscillators connected to the nozzle, spaced along the nozzle in the cross-machine direction, and wherein the program instructions when executed cause at least one or the other of said sonic rod oscillators at a location

approximately corresponding to the cross-machine location of a defect to vibrate.

33. A method as in Claim 1, wherein said sonic oscillator may have one or more nodes, and the additional step of moving said one or more nodes so that the orifice may be kept clean.

34. A method as in Claim 33, wherein moving said one or more nodes is by changing the frequency driving said sonic oscillator.

35. A system as in Claim 25, wherein said sonic rod may have one or more nodes, and means for moving said one or more nodes.

36. A system as in Claim 35, wherein said means for moving said one or more nodes changes the frequency driving said sonic rod.